

ABSTRACT

An activation apparatus (1) is characterized in that two or more of metals or materials mainly containing metals which have different standard electrode potentials are stacked to thereby generate electric charges, and electromagnetic waves are generated by a potential difference between the stacked metals or materials. For example, a layered body (1B) of a two-layer structure having an outer layer metal plate (4) of titanium and an inner layer metal plate (5) of copper is formed into a tubular shape. The layered body is so fixed around a fuel transport pipe (1b) via a plurality of bolts nuts (6) that the outer layer metal plate (4) and the inner layer metal plate (5) divided into two rainwater gutter-like shapes and comprising flanges (4a), (5a) of a joint portion form a two-layer structure having a predetermined space therebetween. The apparatus does not need a new energy source, and is an easily attachable, simple apparatus. The apparatus efficiently activates a fuel to thereby improve fuel consumption.